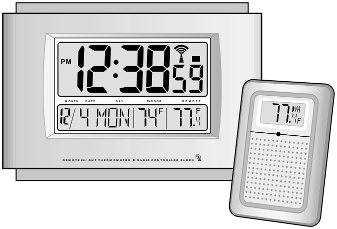
THE
SHARPER
IMAGE®

Atomic Big Digit Clock

with In/Outdoor Temperature

SF003 Instructions


PM
12:38 59
MONTH DATE DAY INDOOR REMOTE
12/4 MON 74F 77.4F
REMOTE IN/OUT THERMOMETER ■ RADIO CONTROLLED CLOCK
77.4F

Read and save these instructions.

Dear Sharper Image Customer,

Thank you for your purchase of a Sharper Image product. We appreciate your business very much.

Please accept my personal assurance of your complete satisfaction with this product's quality and performance. We offer generous return privileges and excellent warranties on all our products.

For more than 25 years, The Sharper Image has shared the fun of discovering innovative products that make life better and more enjoyable. We've been in business a long time because we are an exciting place to shop and — just as importantly — we strive to deliver great customer service that exceeds your expectations.

Enjoy your purchase!

Respectfully,

Richard

Richard Thalheimer
Founder, Chairman and Chief Executive Officer

Call 1-800-344-4444 for 24-7 ordering and customer service,
or go to **www.sharperimage.com***, our complete online store.*

Table of Contents

Warnings....6
  Care and Maintenance....6
  Disclaimer....7
  Battery Precautions....7
  Location Precautions....7
Quick Start....11
  Battery Installation....11
  Operation....11
General Instructions....14
  Introduction....14
  Battery Installation....21
  Operation....22
  Atomic Clock Signal Reception....26
  Manual Clock Setting....28
  Wall Mounting and Fold-Out Stand....30
  Troubleshooting....31
  Specifications....32
Statement of FCC/DHHS Compliance....34
FCC Label Compliance Statement....35
Warranty....36

Warnings

Care and Maintenance

- Avoid exposing your clock to extreme temperatures, water or severe shock.
- Avoid contact with any corrosive materials such as perfume, alcohol or cleaning agents.
- Do not subject the clock to excessive force, shock, dust, temperature or humidity. Any of these conditions may shorten the life of the clock.
- Do not tamper with any of the internal components of this clock. This will invalidate the warranty and may cause damage.

Disclaimer

- The manufacturer and supplier cannot accept responsibility for any incorrect readings and any consequences that may occur should there be an inaccurate reading.
- This product is not to be used for medical purposes or for public information.
- This product is not a toy. Keep out of the reach of children.

Battery Precautions

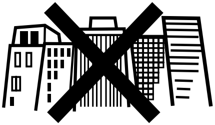
- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc) or rechargeable (nickel cadmium) batteries.

Location Precautions

This clock receives a radio wave much like a TV or radio. Be sure to place it near a window or some other location where reception is optimal.

Location Precautions

For best results, avoid the following locations that can interfere with proper reception:

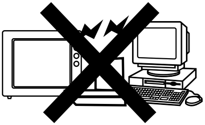


Inside or near concrete or steel buildings and structures, unless the clock is close or next to a window with the curtain open.

Near or close to a power station.

Location Precautions

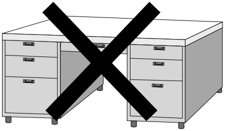
Inside moving vehicles (i.e., automobiles, trains, airplanes, etc.) where radio transmissions or electronics will interfere with the reception of the atomic clock signals.



Close to household appliances (i.e., computers, TVs, stereos, VCRs, fax machines or speakers).

Location Precautions

Near construction sites, traffic lights, roadside lights, neon lights, etc.



Close to or on top of metal surfaces and plates.

Note: The atomic clock can only receive the synchronization signal in the Continental USA. In other areas, you can still use this clock by setting it manually.

Quick Start

Battery Installation

Clock/Main Unit

1. To open the battery compartment on the back of the main unit, remove the battery door.
2. Insert 2 AA batteries, observing proper +/- polarities as indicated.
3. Replace the battery door.

Wireless Transmitter

1. To open the battery compartment on the back of the wireless transmitter, remove the battery door.
2. Insert 2 AA batteries, observing proper +/- polarities as indicated.
3. Replace the battery door.

Operation

Clock/Main Unit

To ensure proper functioning of your clock with indoor/outdoor temperature, please follow this power-up procedure:

Operation

1. Insert new batteries into the main unit first. (See Battery Installation.)
2. Then insert batteries into the remote temperature transmitter. (See Battery Installation.)
3. Slide the **PST**/**MST**/**CST**/**EST** switch on the back of the clock to your local time zone: PST = Pacific Standard Time; MST = Mountain Standard Time; CST = Central Standard Time; EST = Eastern Standard Time.
4. Slide the **DST** (Daylight Saving Time) switch to **ON**. This setting allows your clock to automatically change from Standard Time to Daylight Saving Time each spring and back to Standard Time each fall.

Note: If you live in an area that does not recognize Daylight Saving Time (i.e. Arizona and parts of Indiana), slide the **DST** switch to **OFF**.

5. Do not touch any other buttons or settings on the clock. It automatically receives the remote temperature and sets your clock to the exact time, day, date and indoor temperature.

Remote Temperature Transmitter

1. After installing the batteries (or pressing the RESET button), the temperature RF (radio frequency) signal is immediately sent to the clock. The clock attempts to receive the RF temperature signal for the first 5 minutes and refreshes the RF temperature every 3 minutes.
2. To select Fahrenheit or Centigrade temperature units, press the **°F/°C** button on the remote unit.
3. If the RF temperature signal is not received within 5 minutes, "---" appears in the outdoor temperature window of the clock. In this case, press the **RE-SYNC** button behind the flip-out stand of the clock. The clock then attempts outdoor temperature reception for another 6 minutes.
4. If the clock does not display the outdoor temperature after 6 minutes, relocate the clock or the transmitter until reception is successful.

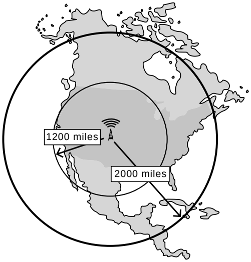
General Instructions

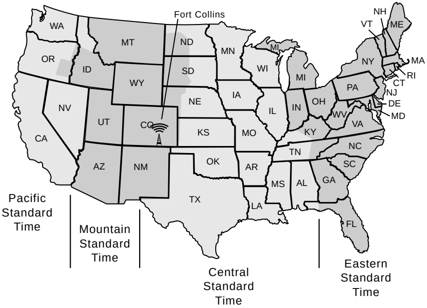
Introduction

This radio-controlled atomic clock is the most accurate timepiece in North America. It receives a time signal transmitted by the National Institute of Standards and Technology (NIST), which is regulated by three atomic clocks and deviates less than one second within 3,000 years. The NIST broadcasts the time signal (WWVB, 60 kHz) continuously from Fort Collins, Colorado. This signal can be received anywhere in the continental USA that long wave (AM) radio reception is possible with a portable radio. It is expected that the signal can cover a distance of over 2,000 miles from the transmitter.

The clock will receive the signal within the broadcast range anywhere an AM signal can be received. Generally the signal cannot be received in massive metal and concrete structures unless near a window. In addition, some environmental effects may affect the transmitting distance. (See Environmental Reception Effects.)

For more information, please study the WWVB Web page of NIST at: http://www.boulder.nist.gov/timefreq/





Environmental Reception Effects

The radio-controlled clock receives an accurate time signal using wireless technology. As with all wireless devices, the reception ability may be affected by, but not limited to, the following circumstances:

- Long transmission distance.
- Nearby mountains and valleys.
- Among tall buildings.
- Near railways, high voltage cables, etc.

- Near freeways, airports, etc.
- Near construction sites.
- Inside concrete buildings.
- Near electrical appliances.
- Near computers and televisions.
- Bad weather locally or electrical storms between you and Colorado.
- Inside moving vehicles.
- Nearby metallic structures.

Features

- Receives 60 kHz WWVB signal.
- Automatic time and date adjustment after atomic signal reception.
- Calendar with day of the week display from January 1, 2000, to December 31, 2097.
- Hour, minute and second display.
- 12- or 24-hour clock format.

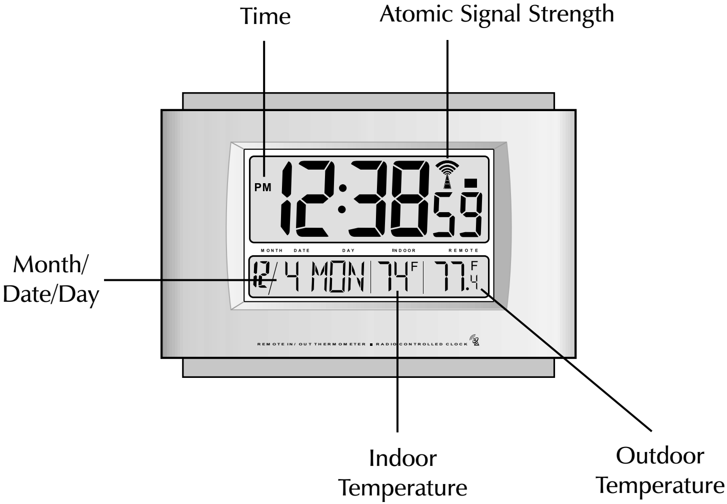
Introduction

- Time accuracy (U.S. Atomic Clock): less than one second in 3,000 years.
- Time accuracy (free run): +/- 60 seconds per month.
- Indoor temperature and remote outdoor temperature.
- Fahrenheit or Centigrade temperature display.
- Battery life: approximately one year with alkaline batteries.
- Clock operating temperature: from 32°F to 122°F (0°C to 50°C).
- Indoor/outdoor temperature measuring range: from -4°F to 140°F (-20°C to 60°C).*
- Temperature resolution: 0.1°C.

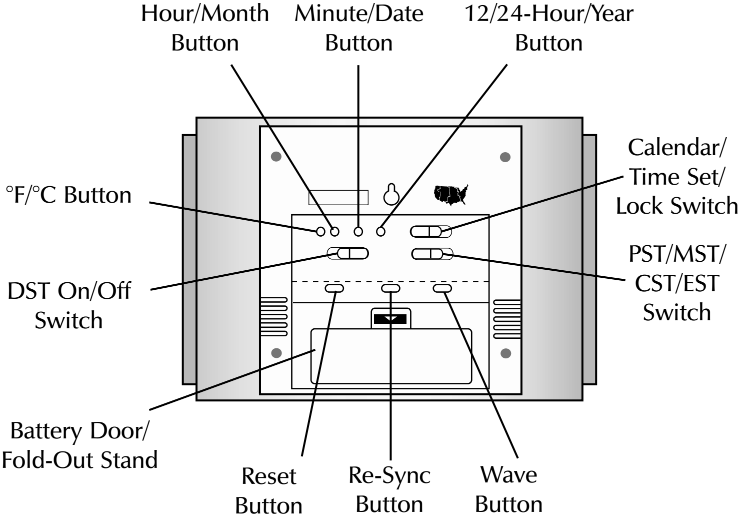
* If using the wireless transmitter with temperatures below 32°F or above 122°F, we recommend using a lithium battery to enhance battery life. The LCD screen on the wireless transmitter will be blurred when operated in extreme temperature conditions. The LCD screen will resume the normal display when placed at room temperature for 1-2 hours.

Diagram of Parts

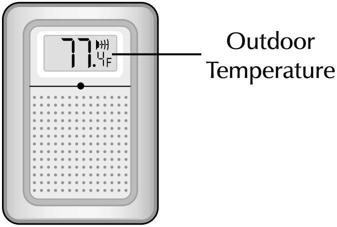
Clock

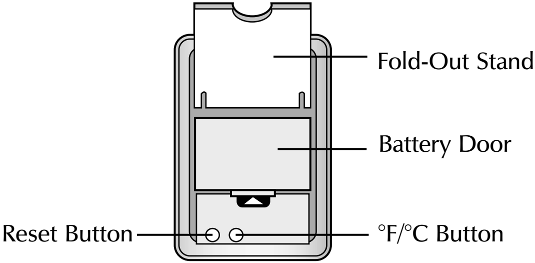


Introduction



Wireless Transmitter





Battery Installation

Clock/Main Unit

1. To open the battery compartment on the back of the main unit, remove the battery door.
2. Insert 2 AA batteries, observing proper +/- polarities as indicated.
3. Replace the battery door.

Note: When a low-battery icon appears in the indoor temperature window on the LCD, replace the batteries.

Wireless Transmitter

1. To open the battery compartment on the back of the wireless transmitter, remove the battery door.
2. Insert 2 AA batteries, observing proper +/- polarities as indicated.
3. Replace the battery door.

Note: When a low-battery icon appears on the transmitter's LCD, replace the batteries.

Battery Precautions

- Do not mix old and new batteries.
- Do not mix alkaline, standard (carbon-zinc) or rechargeable (nickel cadmium) batteries.

Operation

Clock/Main Unit

To ensure proper functioning of your clock with indoor/outdoor temperature, please follow this power-up procedure:

1. Insert new batteries into the main unit first. (See Battery Installation.)
2. Then insert batteries into the remote temperature transmitter. (See Battery Installation.)
3. Slide the **PST**/**MST**/**CST**/**EST** switch on the back of the clock to your local time zone: PST = Pacific Standard Time; MST = Mountain Standard Time; CST = Central Standard Time; EST = Eastern Standard Time.
4. Slide the **DST** (Daylight Saving Time) switch to **ON**. This setting allows your clock to automatically change from Standard Time to Daylight Saving Time each spring and back to Standard Time each fall.

Note: If you live in an area that does not recognize Daylight Saving Time (i.e. Arizona and parts of Indiana), slide the **DST** switch to **OFF**.

5. Do not touch any other buttons or settings on the clock. It automatically receives the remote temperature and sets your clock to the exact time, day, date and indoor temperature.

Remote Temperature Transmitter

1. After installing the batteries (or pressing the RESET button), the temperature RF (radio frequency) signal is immediately sent to the clock. The clock attempts to receive the RF temperature signal for the first 5 minutes and refreshes the RF temperature every 3 minutes.
2. To select Fahrenheit or Centigrade temperature units, press the **°F/°C** button on the remote unit.
3. If the RF temperature signal is not received within 5 minutes, “---” appears in the outdoor temperature window of the clock. In this case, press the **RE-SYNC** button behind the flip-out stand of the clock. The clock then attempts outdoor temperature reception for another 6 minutes.
4. If the clock does not display the outdoor temperature after 6 minutes, relocate the clock or the transmitter until reception is successful.

RF Signal Indicators

The clock's outdoor temperature window shows one of the following RF signal indicators to aid successful reception:

▮···	No Signal Detection
▮)))	Signal Detection
▮)))	Successful Reception

Losing Outdoor Temperature Synchronization

If the clock displays "--" in the outdoor temperature window but has displayed a proper outdoor temperature reading in the past, the wireless transmitter and clock may have lost synchronization. If this occurs, press the **RE-SYNC** button behind the flip-out stand of the main unit. The clock attempts outdoor temperature reception for another 6 minutes and reinitiates synchronization with the wireless transmitter. If the remote temperature cannot be received, check the following:

Operation

1. The distance of the clock and wireless transmitter should be at least 3-4 feet away from any interfering sources such as computer monitors or TV sets.
2. Avoid placing the receiver onto or in the immediate proximity of metal window frames.
3. Using other electrical products such as headphones or speakers operating on the same signal frequency (433 MHz) may prevent correct signal transmission and reception.
4. Neighbors using electrical devices operating on the 433 MHz signal frequency may also cause interference.

Note: When the 433MHz signal is received correctly, do not reopen the battery cover of either the wireless transmitter or the clock, as the batteries may spring free from the contacts and force a false reset. Should this happen accidentally, then reset both units, otherwise transmission problems may occur. (See Reset Function.)

5. The maximum transmission range is 100 feet from the wireless transmitter to the clock (in open space). However, this depends on the surrounding environment and interference levels. If no receipt is possible despite the observation of these factors, all system units have to be reset. (See Reset Function.)

Operation

Reset Function

- If the clock malfunctions or displays an incorrect time even when the strong-signal icon appears on the LCD, press the **RESET** button on the back of the main unit. This may happen when external noise is severe enough to interfere with the time signal.
- If the readout on the wireless transmitter is incorrect, or does not respond, press the **RESET** button on the back of the remote unit.

Atomic Clock Signal Reception

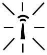
1. Your clock receives the official U.S. time signal from the U.S. Atomic Clock in Ft. Collins, Colorado. Successful reception first activates the receiving-signal indicator followed by the strong-signal indicator on the clock LCD. (See Atomic Signal Indicators below.)
2. If the clock fails to receive the atomic signal in the first reception sequence after power-up, it repeats a 10-minute reception sequence every 30 minutes. This operation stops once the

atomic signal is received. The clock automatically refreshes the atomic signal each night.

3. You can also force a reception attempt of the time signal at any time by pressing the **WAVE** button.

Note: Frequent use of this feature may affect battery life.

Atomic Signal Indicators

	Strong
	Weak
	No Reception
	Receiving

Interference Notes

Signals from other household devices, such as automatic garage door openers, remote controls, doorbells and home security systems, may temporarily interfere with the atomic signal and/or the remote temperature transmission and cause reception failure. This is normal and does not affect the general performance of the unit. The transmission and reception of the temperature reading and atomic signal resumes once the interference has stopped.

Manual Clock Setting

If your clock has not successfully received the atomic clock time signal 20 minutes after power-up, you may set the clock manually or the clock will continue an automatic search every 30 minutes until the signal is received. Optimal reception of the atomic signal occurs during the nighttime when the atmosphere allows a stronger signal to travel farther from the Colorado transmitter. **We strongly recommended that you allow the atomic clock one or two evenings to automatically receive the atomic signal and set itself.**

If you decide to manually set the clock, ensure the time zone and DST switches are properly set (see Reset Function), then follow these steps:

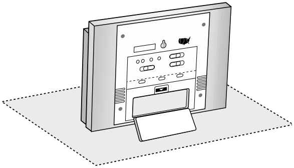
Manual Clock Setting

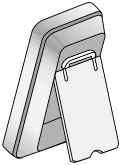
1. To set the time, slide the **CALENDAR/TIME SET/LOCK** switch to **TIME SET**. The clock digits flash on the display.
2. To set the hour and minutes, repeatedly press the **HR** and **MIN** buttons until you reach the current time.
3. To set the calendar, slide the **CALENDAR/TIME SET/LOCK** switch to **CALENDAR.** The year, month and date flash on the display.
4. To set the year, month and date, press the **YEAR, MONTH** and **DATE** buttons until you reach the current calendar setting.
5. To confirm and lock all settings, slide the **CALENDAR/TIME SET/LOCK** switch to the **LOCK** position.
6. To select the desired clock format, press the **12HR/24HR** button. “AM” and “PM” appear on the display only in the 12-hour format.
7. To select Fahrenheit or Centigrade temperature units, press the **°F/°C** button. Both the indoor and outdoor temperatures appear in the selected units.

Note: The remote transmitter unit can display a Fahrenheit or Centigrade measurement regardless of the measurement selected for the clock display. (See Outdoor Temperature Reception.)

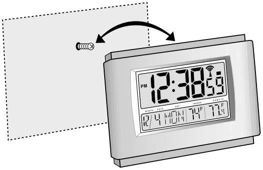
Wall Mounting and Fold-Out Stand

The main and remote units are equipped with built-in stands that fold open to support the clock or remote unit upright on a flat surface. (See figure below.)



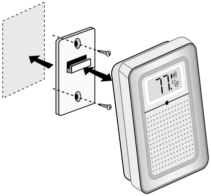


You can also close the stands and mount the units on a wall. To wall mount the main unit, drive a screw into the wall until the head extends about $^1/_8$ inch from the wall, then place the keyhole slot over the screw head and slide the unit down to secure it in place. (See figure below.)



Wall Mounting and Fold-Out Stand

To wall mount the remote unit, place the included wall-mount plate on the desired outdoor location and drive the two screws included through the holes and into the wall. (See figure below.) Slide the remote unit down until it rests securely on the wall-mount plate.



Troubleshooting

- If the clock displays an incorrect time even when the strong signal icon appears on the LCD, press the **RESET** button on the back of the main unit. This may happen when external noise is severe enough to interfere with the time signal.
- If the readout on the wireless transmitter is incorrect or does not respond, press the **RESET** button on the back of the remote unit.

Specifications

Temperature measuring range:

- Indoor: 32°F to 122°F with 0.2°F resolution; 0°C to 50°C with 0.1°C resolution
- Outdoor: -4°F to 140°F with 0.2°F resolution; -20°C to 60°C with 0.1°C resolution

Temperature checking interval:

- Indoor: every 16 seconds
- Outdoor Transmitter: every 16 seconds
- Outdoor temperature display on clock: every 3 minutes

Transmission distance:

- Maximum 100 feet in open field, depending upon surrounding structures, mounting location and possible interfering sources

Power source (Alkaline batteries recommended):

- Main Unit: 2 AA 1.5V batteries
- Wireless Transmitter: 2 AA 1.5V batteries

Specifications

Battery life:

- About 12 months

Dimensions (length x width x height):

- Main Unit: 11¾" x 1" x 8"
- Wireless Transmitter: 4" x 1¼" x 2¾"

Statement of FCC/DHHS Compliance

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This product complies with DHHS Rule 21 subchapter J at date of manufacture.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.

Statement of FCC/DHHS Compliance

- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for assistance.

FCC Label Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Warranty

What Is Covered

This warranty covers any defects in materials or workmanship, with the exceptions stated below.

How Long Coverage Lasts

This warranty runs for 90 days from the date of original purchase.

What Is Not Covered

This warranty does not cover damage caused by misuse or use other than as intended and described in the product instruction manual, or loss or damage to batteries or removable parts.

What The Sharper Image Will Do

The Sharper Image will repair any defects in materials or workmanship. In the event repair is not possible, The Sharper Image will either replace this product with one of similar features and price, or refund the full purchase price of the product, whichever you prefer.

How to Obtain Service

Return the product and receipt, along with a brief explanation of the problem, to:

T.S.I. - Returns Department
2901-A West 60th Street
Little Rock, AR 72209

If you have questions please feel free to contact our customer service representatives at 1-800-344-5555 or by email at care@sharperimage.com.

This warranty gives you specific legal rights, and you may have other legal rights that vary from state to state.

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Shop online: **www.sharperimage.com**

Due to continuing improvements, actual product may differ slightly from the product described herein.
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